

What is claimed is:

1. An oligonucleotide for detection or amplification of VT1 RNA, which oligonucleotide is capable of specifically binding to VT1 RNA, and comprises at least 10 contiguous bases of any of the sequences listed as SEQ. ID. Nos. 1 to 5.

2. An oligonucleotide for detection or amplification of VT2 RNA, which oligonucleotide is capable of specifically binding to VT2 RNA, and comprises at least 10 contiguous bases of any of the sequences listed as SEQ. ID. Nos. 6 to 14.

3. A process of detecting VT1 RNA, wherein a specific sequence of VT1 RNA present in a sample is used as a template for synthesis of a cDNA employing an RNA-dependent DNA polymerase, the RNA of the formed RNA/DNA hybrid is digested by ribonuclease H to produce a single-stranded DNA, said single-stranded DNA is then used as a template for production of a double-stranded DNA having a promoter sequence capable of transcribing RNA comprising said specific sequence or a sequence complementary to said specific sequence employing a DNA-dependent DNA polymerase, said double-stranded DNA produces an RNA transcription product in the presence of an RNA polymerase, and said RNA transcription product is then used as a template for cDNA synthesis employing said RNA-dependent DNA polymerase, the amplification process being characterized by employing a first oligonucleotide capable of specifically binding to VT1 RNA and comprising at least 10 contiguous bases of any of the sequences listed as SEQ. ID. Nos. 1 to 5 and a second oligonucleotide comprising at least 10 contiguous bases of any of the sequences listed as SEQ. ID. Nos. 15 to 18, where either said first or second oligonucleotide includes said RNA polymerase promoter sequence at the 5' end.

4. A process of detecting VT2 RNA, wherein a specific sequence of VT2 RNA present in a sample is used

as a template for synthesis of a cDNA employing an RNA-dependent DNA polymerase, the RNA of the formed RNA/DNA hybrid is digested by ribonuclease H to produce a single-stranded DNA, said single-stranded DNA is then used as a template for production of a double-stranded DNA having a promoter sequence capable of transcribing RNA comprising said specific sequence or a sequence complementary to said specific sequence employing a DNA-dependent DNA polymerase, said double-stranded DNA produces an RNA transcription product in the presence of an RNA polymerase, and said RNA transcription product is then used as a template for cDNA synthesis employing said RNA-dependent DNA polymerase, the amplification process being characterized by employing a first oligonucleotide capable of specifically binding to VT2 RNA and comprising at least 10 contiguous bases of any of the sequences listed as SEQ. ID. Nos. 6 to 14 and a second oligonucleotide comprising at least 10 contiguous bases of any of the sequences listed as SEQ. ID. Nos. 19 to 23, where either said first or second oligonucleotide includes the RNA polymerase promoter sequence at the 5' end.

5. The process according to claim 3 or 4, wherein said amplification process is carried out in the presence of an oligonucleotide probe capable of specifically binding to the RNA transcription product resulting from said amplification and labeled with an intercalator fluorescent pigment, and changes in the fluorescent properties of the reaction solution is measured, with the proviso that the labeled oligonucleotide has a sequence different from those of the first oligonucleotide and the second oligonucleotide in the sequence.

6. The detection process according to claim 5, characterized in that said oligonucleotide probe is designed so as to complementarily bind to at least a portion of the sequence of said RNA transcription product, and the fluorescent property changes relative to

that of a situation where a complex formation is absent.

7. The detection process according to claim 5, characterized in that said oligonucleotide probe for detecting said VT1 mRNA comprises at least 10 contiguous bases of SEQ. ID. No. 24 or its complementary sequence.

8. The detection process according to claim 5 for detecting said VT2 RNA, characterized in that said oligonucleotide probe comprises at least 10 contiguous bases of SEQ. ID. No. 25 or its complementary sequence.

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